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GenCore version 5.1.6
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- nucleic search, using sw model OM nucleic Run on:

June 23, 2005, 12:35:19 ; Search time 0.001 Seconds (without alignments) 816.192 Million cell updates/sec

US-09-541-462B-1 327 Title: Perfect score: Sequence:

1 atggcggcagcgatggatgt......tccaaaagtatgggcactag 327

IDENTITY\_NUC Gapop 10.0 , Gapext 0.5 Scoring table:

3 segs, 1248 residues Searched: Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

gb.seq:\* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

403 1	366 1	479 1	479 1	403 1	366 1
:					
	403 1 h71993	403 1 h71993 366 1 w66989	403 1 h71993 366 1 w66989 479 1 aa260889	403 1 h71993 366 1 w66989 479 1 aa2660889 479 1 aa260889	403 1 h71993 366 1 w66989 479 1 aa266889 479 1 aa260889 403 1 h71993

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## ALIGNMENTS

ESULT 1 71993 TOIG of: h71993 check: 7893 from: 1 to: 403	H71993  Wr99g04.rl Soares fetal liver spleen lNFLS Homo sapiens CDNA clone IMAGE:213366 5' similar to SP:F35G12.9 CE00978; mRNA sequence.  N H71993.1 GI:1043809  H71993.1 GI:1043809  BST. Homo sapiens (human)  SM Homo sapiens (human)  SM Homo sapiens (human)  SM Homo sapiens (human)  Homo sapiens (human)  SM Homo sapiens (human)  SM Homo sapiens (human)  Homo sapiens (human)  SM Homo sapiens (human)  Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.  Homo sapiens (human)  Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.  Hammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.  Chissoe, S., Dietrich, N., Dubuque, T., Favello, A., Caish, N., Hulthan, M., Kucaba, T., Lacy, M., Le, M., Le, N., Mardis, E., Moore, B., Morris, M., Parsons, J., Prange, C., Rifkin, L., Rohlfing, T., Schellenberg, K., Soares, M.B., Tan, F., Thierry-Meg, J., Trevaskis, E., Underwood, K., Wohldmann, P., Waterston, R., Wilson, R., and Marra, M.
RESULT 1 h71993 ; TOIG of:	LOCUS DEFINITION ACCESSION VERSION VERSION SOURCE ORGANISM REFERENCE AUTHORS

Generation and analysis of 280,000 human expressed sequence tags Genome Res. 6 (9), 807-828 (1996) 97044478 8889549 Contact: Wilson RK Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108 Tel: 314 286 1800 Email: est@watson.wustl.edu Insert Size: 553 High quality sequence stops: 308 Source: IMAGE Consortium, LLNL This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@mage.llnl.gov) for further information. Insert Length: 553 Std Brror: 0.00 Seq primer: MIJRPL	Location/Onal if there	1403	/organism="Homo sapiens"	/mol_type="mRNA"	/db_xref="GDB:3778670"	/db_xref="taxon:9606"	/clone="IMAGE:213366"	/sex="male"	/dev_stage="20 week-post conception fetus"	/lab_host="DH10B (ampicillin resistant)"	/clone_lib="Soares fetal liver spleen lNFLS"	/note="Organ: Liver and Spieen; Vector: pT/T3D (Pharmacia)	with a modified polytinker; site 1: Pac 1; site 2: Eco K1;	1st strand clove was primed with a Pac 1 - oligo(dI) primer	S. ARCIGGARGATITATITATITATITATITATITITITITITITITITI	double-stranged cDNA was ilgated to ECO KI adaptors	(Pharmacia), digested with Pac I and cloned into the Pac I	and ECO KI Bices Of the modified pivis vector. Library	constructed by Bento Soares and M Fatima Bonaldo."		Tearth: 403 True 23 2005 12:10 Time: N Check: 7893	יים מוום בז' בספט דב: זה יא בוופרע:
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5 CGCCAGCGATGGGATGTGGATACCCCGAGCGGCACCAACAGCGGCGCGGCGAAGAGCGCT Gарв 3, Length 403; 5; Indels Query Match

84.8%; Score 277.3; DB 1;
Best Local Similarity 97.5%; Pred. No. 0.74;
Matches 310; Conservative 0; Mismatches 5;

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68 TIGAAGTGAAAAAGTGGAATGCAGTAGCCCTCT-GGCTNGGGATATTGTGGTGATAACT 126
                                                                                             65 TTGAAGTGAAAAGTGGAATGCAGTAGCCCTCTGGGCCTGGGATATTGTGGTTGATAACT 124
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9 CAGNAGCGATGGGATACCCCGAGCGCACCAACACGGGGG-GNGCAAGAAGGCGCT
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2 RESULT

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91 GTTAAAAAGTGGAATGCAGTGGCCTCTGCGTGCGTGACATTGCTGGTTGATAACTGTGC
                                        129 CATCTGCAGGAACCACATTATGGATCTTTGCATAGAATGTCAAGCTAACCAGGCGTCCGC
                                                                        151 CATCTGCAGGAACCACATTATGGATCTTTGTATCGAATGTCAGGCCAACCAGGCGTCACG
                                                                                                                  189 TACTTCAGAAGAGTGTACTGTCGCATGGGGAGTCTGTAACCATGCTTTTCACTTCCACTG
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                                                                                                                                                                                                                                                                  1 (bases 1 to 366)
Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T., Gelsel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M., Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B., Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                                                        Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                            Mus musculus (house mouse)
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
MGI:240804
Seq primer: mob.REGA+ET
High quality sequence stop: 354.
Location/Qualifiers
1..366
//organism=Muss musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Marra M/Mouse EST Project
WashU-HHMI Mouse EST Project
Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
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                    TOIG of: w66989 check: 1388 from: 1 to: 366
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clone="IMAGE:388972"
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/strain="C57BL/6J"
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Best Local Similarity 90.0%;
Matches 287; Conservative
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Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
1 (Dases I to 479)
Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuque, T., Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M.,
Schellenberg, K., Steptce, M., Tan, F., Underwood, K., Moore, B.,
Theising, B.,
Waterston, R.
The WashU-HMMI Mouse EST Project
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/lab_host="DH10B"
/clone llb="Soares mouse lymph node NbMLN"
/note="Corgan: lymph node; Vector: pT7T3D-Pac (Pharmacia)
with a modified polylinker; Site 1: Not I; Site 2: Eco RI;
lst strand cDNA was primed with a Not I - oligo (dI) primer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished (1996)

Contact: Marra M/Mouse EST Project
WashU-HHMI Mouse EST Project
WashU-HHMI Mouse EST Project
Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1810
Fax: 314 286 1810
Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Seq primer: -28ml3 rev2 ET from Amersham
High quality sequence stop: 400.
Location/Qualifiers
from: 1 to: 479
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sex="male"
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/strain="C57BL/6J"
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Mus musculus
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Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T., Schellenberg,K., Steptoe,M., Le,M., Martin,J., Morris,M., Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B., Theising,B., Wylle,T., Lennon,G., Soares,B., Wilson,R. and
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provided by Dr. Bertrand Jordan. Library constructed and
normalized by Bento Soares and M.Fatima Bonaldo."
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This clone is available royalty-free through LLNL ; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
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Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: mouseest@watkon whell all.
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Pred. No. 0.9;
0; Mismatches 34;
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Unpublished (1996)
Contact: Marra M/Mouse EST Project
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Seq primer: -28ml3 rev2 ET from
High quality sequence stop: 400.
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H71993 403 bp mRNA linear EST 26-OCT-1995 yr98g04.rl Soares fetal liver spleen lNFLS Homo sapiens cDNA clone IMAGE:213366 5' similar to SP:F35G12.9 CE00978 ;, mRNA sequence.
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1 (bases 1 to 403)

Hillier,L., Lennon,G., Becker,M., Bonaldo,M.F., Chiapelli,B., Chissoe,S., Dietrich,N., DuBuque,T., Favello,A., Gish,W., Hawkins,M., Hultman,M., Kucaba,T., Lacy,M., Le,M., Le,N., Mardis,E., Moore,B., Morris,M., Parsons,J., Prange,C., Rifkin,L., Rohlfing,T., Schellenberg,K., Soares,M.B., Tan,F., Thierry-Meg,J., Trevaskis,E., Underwood,K., Wohldmann,P., Waterston,R., Wilson,R. and Marra,M.
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Genome Res. 6 (9), 807-828 (1996)
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Source: IMAGE Consortium, LLNL
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Insert Length: 553 Std Error: 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@wasteon.wustl.edu
Insert Size: 553
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length: 479 June 23, 2005 12:30 Type: N Check: 515
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 18.6; DB 1; Length 479;
Pred. No. 4.5;
0; Mismatches 19; Indels
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                                                                                                                         tissue_type="lymph node"
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Seq primer: M13RP1
High quality sequence stop: 308.
                                                  /db_xref="taxon:10090"
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                                                                                                      /sex="male"
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Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 5.7%;
Best Local Similarity 61.2%;
Matches 30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Wilson RK
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                                                                                                                                                                  Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 366)

Marram, Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuque, T.,

Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M.,

Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B.,

Theising, B., Wylie, T., Lennon, G., Soares, B., Wilson, R. and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        234 TITICACTICCACTGCATCTCTCGCTGGCTCAAAACACGAGGTGTGTCCATTGGACAA 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  316 Tricgaariccccacrererererenaricaacacaccacciererrangaccaccac
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This clone is available royalty-free through LLNL ; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W66989 3.14-JUN-me30a03.rl Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone IMAGE:388972 5' similar to WP:F35G12.9 CE00978 ;, mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       June 23, 2005 12:30 Type: N Check: 7893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 5.3%; Score 17.4; DB 1; Length 403; Best Local Similarity 49.5%; Pred. No. 5.3; Matches 45; Conservative 0: Mismatches 46: Thadale
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 6
w66989/c
; TOIG of: w66989 check: 1388 from: 1 to: 366
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                                          organism="Homo sapiens"
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Seq primer: mob.REGA+ET
High quality sequence stop: 354.
                                                                mol_type="mRNA"
'db_xref="GDB:3778670"
                                                                                                      db_xref="taxon:9606"
clone="IMAGE:213366"
ocation/Qualifiers
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Mus musculus
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                                                                                                                                                         sex="male"
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                                                                                                                                                                                                                                                                                                                        4.2%; Score 13.8; DB 1; Length 366; 58.5%; Pred. No. 5.9;
                                                                                                                                                                                                                                                                                                                                                                    205 ACTGTCGCATGGGGAGTCTGTAACCATGCTTTTCACTTCCA 245
                                                                                                                                                                                                                                                                                                                                              17;
                                                                                                                                                                                                                                                                                                                                              0; Mismatches
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Best Local Similarity 58.5°
Matches 24; Conservative
FEATURES
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Search completed: June 23, 2005, 12:35:20 Job time: 1 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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- nucleic search, using frame\_plus\_p2n model OM protein Run on:

June 23, 2005, 12:36:48; Search time 0.001 Seconds (without alignments) 269.568 Million cell updates/sec

US-09-541-462B-2 616 1 MAAAMDVDIPSGTNSGAGKK......KTRQVCPLDNREWEFQKYGH 108 Perfect score: Sequence:

**BLOSUM62** Scoring table:

0.5 Xgapop 10.0 , Xgapext Ygapop 10.0 , Ygapext Fgapop 6.0 , Fgapext Delop 6.0 , Delext

3 seqs, 1248 residues Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Command line parameters:
-MODEL=frame+ p2n.model -DEW=soft -Q=US09541462B.pep -DB=gb.seq -SUFFIX=pto
-OUT=aa.res -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1
-OUT=aa.res -MINMATCH=0.1 -LOOPCL=0 -LOOPCL=0 -CONITS=bits -START=1 -END=-1
-THR MAX=100 -THR SCORE=human40 -cdi -LIST=45 -DOCALIGN=bto -THR SCORE=pct
-THR MAX=100 -THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFWT=pto -NORM=ext
-HRAPESIZES=500 -MINIBLEN=0 -MAXLEN=200000000 -NCPU=6 -NO XLPXY -NEG\_SCORES=0
-LONGLOG -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7 -YGAPOP=10

gb.seq:\* Database : Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Description	TOIG of: w66989	TOIG of: h71993	TOIG of: aa26088	TOIG of: aa26088	TOIG of: w66989	TOIG of: h71993
Ω.	w66989	h71993	aa260889	aa260889	w66989	h71993
DB	-	٦	Н	Н	-	-
å Query core Match Length DB ID	366	403	479	479	366	403
A Query Match	87.5	86.0	84.5	7.2	6.8	6.3
Score	539	530	520.5	44.5	42	39
Result No.	-	7	٣	Ω	0	y U

## ALIGNMENTS

	.1996					
	4-JUN CDNA	RNA				
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	366 bp mRNA linear EST 14-JUN-1996 embryo NDME13.5 14.5 Mus musculus cDNA	CE0097				
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RESULT 1 w66989	LOCUS			ACCESSION	VERSION	KEYWORDS

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eCysArgAsnHisIleMetAspLeuCysIleGluCysGlnAlaAsnGlnAlaSerAlaTh

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8 8 ò

	SOURCE ORGANISM	Mus musculus (house mouse) Mus musculus Bukarryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia: Butheria: Rodentia: Sciuroqnathi; Muridae; Murinae; Mus
	REFERENCE AUTHORS	1 (bases 1 to 366)  Martan, M. Hallier, L., Allen, M., Bowles, M., Dietrich, N., Dubuque, T., Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylie, T., Lennon, G., Soares, B., Wilson, R. and Waterston, R.
	TITLE JOURNAL COMMENT	The WashU-HHMI Mouse EST Project Unpublished (1996) Contact: Marxa M/Mouse EST Project WashU-HHMI Mouse EST Project WashIngton University School of MedicineP 444 Forest Park Parkway, Box 8501, St. Louis, MO 63108 Tel: 314 286 1810 Fax: 314 286 1810 Fax: 314 286 1810
	FEATURES	84 65
	Bource	1366 /organism="Mus musculus" /mol_type="mRNA" /strain="C57BL/6J" /db_xref="taxon:10090" /clone="IMAGE:38872"
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		was primed, treat, and 1 - oligo[dr] primer [5] was primed with a Not 1 - oligo[dr] primer [5] TGTTACCAATCTGAAGTGCAGCGCGCGCGAAATTTTTTTT
	ORIGIN	pT7T3 vector. Library went through one round of normalization, and was constructed by Bento Soares and M.Fatima Bonaldo. "
3	; ; W66989 I w66989	Length: 366 June 23, 2005 12:30 Type: N Check: 1388
Scoon Beer	Alignment Scores: Pred. No.: Score: Percent Similarity: Percent Similarity Query Match: DB:	res: 0.0863 Length: 366
US	US-09-541-462B-2	3-2 (1-108) x w66989 (1-366)
\$ a	34	MetabyalapthrProSerGlyThrAbnSerGlyAlaGlyLyBLyBArgPheGluval 24 
& 8	25	Lystystrphsnalavalalateutrpalatrpaspile-valvalaspasnCysAlail 44 

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Seg primer: -28m13 rev2 ET from Amersham
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                                                                                                                                                                                                                                                                                                                                                                                                                  Bukaryogia, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

Hillier, L. Lennon, G. Becker, M., Bonaldo, M.F., Chiapelli, B., Chissoe, S., Dietrich, N., DuBuque, T., Favello, A., Gish, W., Hawkins, M., Hultman, M., Kucaba, T., Lacy, M., Le, M., Le, N., Mardis, E., Moore B., Morris, M., Parsons, J., Prange, C., Rifkin, L., Rohlfing, T., Schellenberg, K., Soares, M. B., Tan, F., Thierry-Meg, J., Trevaskis, E., Underwood, K., Wohldmann, P., Waterston, R., Wilson, R.
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Genome Res. 6 (9), 807-828 (1996)
                                                                                             eSerhrgTrpLeuLysThrArgGlnValCysProLeuAspAsnArgGluTrpGluPheGl 104
   213
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                                                                                                                 CTCTCGATGGCTCAAAACGAGGAGGTGTGTCGTTGGACAACAGAGAGTGGGAGTTCCA 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: estewatson.wustl.edu
Insert Size: 553
High quality sequence stops: 308
Source: IMAGE Consortium, LINL
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Insert Length: 553 Std Error: 0.00
Seq primer: MISRPI
High quality sequence stop: 308.
Location/Qualifiers
                                 84
CTGCAGGAACCACATTATGGATCTTTGTATCGAATGTCAGGCCAACCAGGCGTCACGTAC
                               rSerGluGluCysThrValAlaTrpGlyValCysAsnHisAlaPheHisPheHisCysIl
                                                       TTCCGAAGAGTGTACGGTTGCATGGGAGTCTGCAACCATGCTTTTCATTTCCACTGCTAT
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Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
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AA260889 arouse lymph node NbMLN Mus musculus CDNA clone IMAGE:721697 5' similar to WP:ZK287.5 CE06614 ;, mRNA sequence.
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Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T., Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B., Theising,B., Wylle,T., Lennon,G., Soares,B., Wilson,R. and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73 GTGAAAAAGTGGAATGCAGTAGCCCTCTGGCTNGG-GATATTGTGGGTTGATAACTGTGCC
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Contact: Marra M/Mouse EST Project
Washly-HHNI Mouse EST Project
Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1810
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and M.Fatima
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The WashU-HHMI Mouse EST Project
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                                                                                                                                                                                                                                                                                  Gaps:
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Mus musculus
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Mus musculus
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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                                                                                                                                The WashU-HHMI Mouse BST Project
Unpublished (1996)
Contact: Marra M/Mouse EST Project
WashU-HHMI Mouse EST Project
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                                                                                                                                                                                                                                                                                                                                                                                   /organism="Mus musculus"
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 ORGANISM
                                            REFERENCE
AUTHORS
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JOURNAL
COMMENT
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                                                                                                                                                                                                                                           /note="Organ: lymph node; Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site 1: Not I; Site 2: Eco RI; lst strand cDNA was primed with a Not I - oligo(dT) primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA260889 479 bp mRNA linear EST 18-MAR-1997 va01h09.rl Soares mouse lymph node NbMLN Mus musculus cDNA clone IMAGE:721697 5' similar to WP:ZK287.5 CE06614 ;, mRNA sequence.
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Location/Qualifiers
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EST.
Mus musculus (house mouse)
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/clone_lib="Soares mouse lymph node NbMLN"
//note="Organ: lymph node; Vector: pT773D-Pac (Pharmacia)
with a modified polylinker; Site_l: Not I; Site_2: Eco RI;
lst strand cDNA was primed with a Not I - oligo(dT) primer
[5,
1 (bases 1 to 479)
Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T.,
Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptce,M., Tan,F., Underwood,K., Moore,B.,
Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3'); double stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not and Eco RI sites of the modified pT/T3 vector. RNA provided by Dr. Bertrand Jordan. Library constructed and normalized by Bento Soares and M. Patima Bonaldo."
                                                                                                                                                                                                                                                                        Washington University School of MedicineP
Washington University School of MedicineP
444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1810
Fax: 314 286 1810
Email: mouseest@watson.wustl.edu
Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; AA260889 Length: 479 June 23, 2005 12:30 Type: N Check: 515
aa260889
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--AGTTATCAACCAĠĊA 132

81 96

61

42 CysAlaIleCysArgAsnHisIleMetAspLeuCysIleGluCysGlnAlaAsnGlnAla

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82 HisCyslleSerArgTrpLeuLysThrArgGlnValCysProLeu 96

167 reregricciecadarecacac

95 TTAACTTCAAAGCGCTTCTTGCGCGCGCCGCTGTTGGTGCCGCTG

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RESULT 6
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                                                                                                                                                                                         Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 366)
Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T.,
Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B.,
Theisling,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
MGI:240804
                                                                                                                                                                                                                                                                                                                                                                     Unpublished (1996)
Contact: Marka WiMouse EST Project
WashU-HHMI Wouse EST Project
WashIngton University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Fax: 314 286 1810
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                  to: 366

    .366
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/mol_type="mRNA"
/strain="C57BL/6J"

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Seg primer: mob.REGA+ET
High quality sequence stop: 354
Location/Qualifiers
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#66989/c
; TOIG of: w66989 check: 1388 from: 1
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W66989.1 GI:1375916
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KEYWORDS
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AUTHORS
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H71993 403 bp mRNA linear EST 26-OCT-1995 yr98g04.rl Soares fetal liver spleen INFLS Homo sapiens CDNA clone IMAGE:213366 5' similar to SP:F35G12.9 CE00978 ;, mRNA sequence.
                                                                                                                                             Generation and analysis of 280,000 human expressed sequence tags
Genome Res. 6 (9), 807-828 (1996)
97044478
                                                                                                                                                                                                                                                                                                                                                          Contact: Wilson RK
Washington University School of Medicine
444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@wateson.wustl.edu
Insert Size: 553
High quality sequence stops: 308
Source: IMAGE Consortium, LLNL
This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
Insert Length: 553
Std Error: 0.00
from: 1 to: 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .403
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Insert Length: 553 Std Error:
Seg primer: M13RP1
High quality sequence stop: 308.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="mRNA"
/db_xref="GDB:3778670"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /db_xref="taxon:9606"
/clone="IMAGE:213366"
                                                                                       H71993.1 GI:1043809
                                                                                                                 Homo sapiens (human)
Homo sapiens
TOIG of: h71993 check: 7893
                                                                                                                                                                                                                                                                                                                                                 8889549
                                                                         H71993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                             LOCUS
DEFINITION
                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                               REFERENCE
AUTHORS
                                                                         ACCESSION
                                                                                         VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                       SOURCE
```

; ORIGIN

366 14 6 19 16

Length: Matches: Conservative: Mismatches: Indels:

> 42.00 36.36% 25.45% 6.82%

> > Percent Similarity: Best Local Similarity: Query Match:

Alignment Scores:

.. No.: US-09-541-462B-2 (1-108) x w66989 (1-366)

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h71993 Alignment Scores:
Pred. No.: 5.25 Length: 403
Score: 39.00 Matches: 11
Percent Similarity: 41.38$ Conservative: 1
Best Local Similarity: 37.93$ Mismatches: 9
Query Match: 1 Gaps: 1
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US-09-541-462B-2 (1-108) x h71993 (1-403)

8 8 8

125 GFTATCACCACAATATCCCAAGGGGCTACTGCATTCCAC
86 ArgTrpLeulysThrArgGlnValCys 94
|||:::|||
65 GGTTCTTGCNCCGCCGTTGGTGC 39

סט הפרוזרוופרארנפרנפרופוופפופנ 35

Search completed: June 23, 2005, 12:36:48 Job time: 0.001 secs

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